DOCUMENT RESUME

ED 048 711 EC 031 987

AUTHOR	Harrison, Robert H.; Budoff, Milton
TITLE	Demographic, Historical and Ability Correlates of the Laurelton Self-Concept Scale in an Educable Mentally Retarded Sample. Volume 1, Number 15.
INSTITUTION	Research Inst. for Educational Problems, Cambridge, Mass.
PUB DATE	70
NOTE	47p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	*Attitude Tests, Correlation, *Educable Mentally Handicapped, *Exceptional Child Research, *Self Concept, *Test Reviews, Test Validity
IDENTIFIERS	Laurelton Self Concept Scale

ABSTRACT

To investigate the validity of the Laurelton Self Concept Scale (LSCS), 172 educable retardates on whom the original factor analysis was done served as subjects. The LSCS was administered orally and criterion variables were broken down into ten groups. Results indicated that reported self concepts of the educable bear considerable relationships to the objective facts of their role, situation, and behavior. The directions of some of the relationships were the reverse of what might have been expected indicating the operation of denial. High threat areas evoked more denial than low, and low intelligence was more associated with denial than high in this study. Tables of data are included. (RJ)

EC031987

ED048711

STUDIES IN LEARNING POTENTIAL

DEMOGRAPHIC, HISTORICAL AND ABILITY CORRELATES OF THE LAURELTON SELF-CONCEPT SCALE IN AN EDUCABLE MENTALLY RETARDED SAMPLE

By

Robert H. Harrison and Milton Budoff

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

EC 031 987E

Volume 1, Number 15
1970

Research Institute For Educational Problems
12 Maple Avenue Cambridge, Massachusetts

1

EC031987

ED048711

DEMOGRAPHIC, HISTORICAL AND ABILITY CORRELATES OF THE LAURELTON SELF-CONCEPT SCALE IN AN EDUCABLE MENTALLY RETARDED SAMPLE[1]

Robert H. Harrison and Milton Budoff
Research Institute for Educational Problems[2]

Harrison and Budoff (1969) recently factor-analyzed 137 of the 150 items on the Laurelton Self-Concept Scale (LSCS) (Guthrie, Butler and Gorlow, 1961) along with the 23 items of the Bialer-Cromwell Locus of Control Scale for Children (LC) (Bialer, 1961), and found rotated orthogonal solutions for 11, 29, and 38 factors, using various criteria to determine when the factoring procedure should be terminated. The interpretability of the resulting factors was good, and the stability of the factors from the 29 and 38 factor solutions was high. Having demonstrated that factor analysis made considerable sense of the data, and that the factorial results were fairly stable over the various rotations, it seemed necessary to determine whether the factors derived from the LSCS were valid. That is, do the factors relate meaningfully to criterion variables whose measurement is "objective," i.e., not based on introspective report?

No attempt will be made to set-up a hypothetico-deductive framework for how self-concept variables in an educable mentally retarded (EMR) population should be related to demographic, behavioral, and ability variables. The literature on this issue is far from conclusive in normal samples: it would seem folly to predict in advance how a sample with probably a lower degree of verbal sophistication, and social status should react to a verbal scale requiring introspection and honest reporting. The results to be reported, then, will be empirical and descriptive.

Method

Subjects The Ss used for this validity study are those 172 EMRs in their low teens on whom the original factor analysis was carried out. For any one criterion variable, usually only a subsample of Ss was available, since they were recruited from a variety of schools and institutional settings in Massachusetts: Belchertown State School, 49; Western Massachusetts special classes, 32; Brookline special classes, 21; Boston special classes (chiefly Gavin Junior High School, 70). Some information (such as age and IQ) was available from all these settings; other historical information was available only in some institutional settings and not in others. Even within the same setting, some children had been exposed to certain procedures (e.g., a WISC with verbal and performance IQs) while others had not. In the course of reporting results an attempt will be made to describe the nature of the subsample on which most of the correlations are based for each criterion variable.

Procedure The Laurelton and Bialer Scales were administered orally, with frequent checks to make sure that the Ss were recording their responses in the appropriate blanks of an IBM answer sheet. Questions to which Ss did not respond were scored as falling half way between T and F. Factor scores for the 11, 29, and 38 factor rotations were computed according to the direct method outlined by Harman (1967) which involves computing principal component factor scores and then premultiplying these by the transpose of the appropriate transformation matrix (Harman, 1967; equation 16.9). The resultant factor scores were then correlated with each other and with the criterion variables.

Results

The criterion variables are broken down into the following groups: 1) age and age-related variables; 2) other status-determining demographic variables; 3) variables having to do with family size and intactness; 4) variables having to do with the English-speaking capabilities of the parents; 5) variables having to do with illness; 6) variables having to do with brain damage and illnesses causing brain damage; 7) variables having to do with school attendance; 8) variables having to do with Budoff's learning potential procedure (1969) using the Kohs block designs; 9) variables having to do with general intelligence; and 10) variables having to do with paired associates learning ability.

For each set of criterion variables, two tables will be presented: one describing the population in terms of these variables, including their intercorrelations, the other showing the correlations between the LSCS factors and the set of criterion variables. In the latter, for the sake of clarity,only correlations significant beyond the .05 level will be reported in the tables. Within each table, factors from the 29 and 38 factor rotations are grouped under the factors defined by the 11 factor rotation.[3] Since a given higher order factor sometimes correlates with more than one of the major (11) factors it was grouped in any specific table with that major factor which had the most similar pattern of correlation with the criterion variables under consideration. If a choice was available as to which group a factor belongs (e.g., factor 5-11 versus 10-11), it was placed in the group having a similar pattern of correlations with the criterion variables as did other factors in the same group.

The numerical degree of relationship between factors and criteria will not be repeated in the text describing the tables.[4] However, the direction of the relationship will always be interpreted. The reader should also remember that the correlations are between criterion variables and

the way subjects describe themselves on this test, and not between criterion variables and the way the Ss "actually" are.

Insert Table 1 about here

Age and Age-Related Variables Chronological age; age first entered special class; years spent in special class; years spent in Northeastern U.S.

Table 1 presents the intercorrelations between these four variables, and shows that they generally correlate positively with each other with the exception of the age at which a child first entered special class. This latter variable correlates positively with age, but negatively with years in special class and years in the Northeastern U. S. In other words, children who were older when they first entered special class have spent less time in special class, as might be expected. Children who entered special class at an older age have spent less of their lives in the Northeastern U. S. than those who entered at a younger age. This is probably related to the greater availability of special class programs in the Northeastern U. S. as compared to many other parts of the country.

Insert Table 2 about here

The significant correlations between self-concept factors and age related variables can be seen in Table 2. Probably the most general statement that can be made is that older children direct anger and criticism at themselves while younger children direct these feelings outwards. Younger children express anxiety through aggressive action

(2-11, 6-29, 13-38, 34-38)[5] and suffer its consequences (24-38) rather than through aggressive words (3-11) or through inwardly directed depressive feelings (7-11, 20-29, 30-38). Younger children are more narcissistic about their looks (11-29, 11-38) than are older children. In contrast, older children are more inclined to see themselves as doing badly in school (4-11). They say that they are more attached to their home (13-29) and more filled with good intentions for their future (14-29, 14-29). They report that they feel more superior to others (16-38) and more aloof from others (31-38) than do younger children.

Children who entered special class at an older age display a very similar profile of personality characteristics to those children who are older, excepting that they are not identified by factors connoting low or high degrees of maladjustment and anger (e.g., excitable aggressiveness, combativeness, lack of self-respect). Children who entered special class at a later age are particularly characterized by a poor opinion of themselves (11-29, 22-38, 15-29, 15-38), a great deal of depression (28-29, 30-38), and a fear of being rejected by elders (13-29, 36-38, 20-29). One may infer that they have suffered a greater blow to their narcissism by knowing what regular class is like, and by using regular class children as a reference group with whom they compare themselves.

Children who have spent a long time in special class display a number of traits which could reasonably be associated with a sheltered environment: they are more naively optimistic about themselves (15-29, 15-38), they are more willful or used to getting their own way (12-29), and while they are more mischievous (36-38) they tend to direct aggression inward (29-38) rather than outward.

Children who have grown up in the Northeastern U.S. share a self-critical attitude (29-38) with children who have spent a long time in special class. They share with older children generally a sense of inadequacy in school (4-11, 33-38). However, in contrast to the other older groups, they deny feelings of depression (28-29) and disclaim altruistic concerns (4-38).

Insert Table 3 about here

Other Role-Determining Variables Sex, Race, Institutionalization, and Social Class. Table 3 gives the descriptive data and intercorrelations between these four variables. Their intercorrelations are generally low, and the two low but significant correlations show that Negro girls and white boys are over-represented in the sample, and that institutionalized children tend to be white, while special class children tend to be Negro. We make no claim that either of these findings is generalizable beyond the study sample.

Insert Table 4 about here

Table 4 gives the correlations between self-concept factors and these role determining variables. Most generally, the various low-status groups under consideration (girls, Negroes, institutionalized children, and poor children) agree on their feelings of social inferiority, on behaving well, and on their positive motivation to succeed and to be acceptable. They also agree on their preoccupation with issues of self-image, of social adjustment, and of depression, whether by admitting a sense of failure in these areas or by denying it.

Sex EMR girls differ from EMR boys in two main areas: social adjustment outside the home, and narcissism. Girls report that they are not as comfortable at school as are boys (10-11), particularly with adults (10-29, 10-38). They feel more lonely (32-38). At the same time they report a greater degree of immature attachment to their homes, in terms of being more obedient (6-11) and dependent on their

parents for a positive self-image (37-38). They think less well of themselves (5-11, 7-38) than do EMR boys, particularly when it comes to looks (11-29) and they are not (when compared with boys) as capable of blaming others for difficult situations (12-38) or attributing unfriendly opinions to them (20-38). Along with the other low status groups, they report more positive motivation (8-11), particularly concern for unfortunate others (4-38) and more depression (28-29). Girls also score higher on combativeness (3-11) than boys. Since the major component of combativeness, the social desirability lie scale (3-29, 3-38), does not differentiate between boys and girls, other items in factor 3-11 (having to do with sticking up for people who are in trouble) would seem to account for the correlation.

To summarize, girls in this group feel more socially stigmatized by their EMR status than do boys. They reject themselves more, and feel more dependent on their families for self-respect and self-confidence.

Race Negroes, like EMR girls, report a poorer school social adjustment (10-11) than do white EMRs. They are not as used to getting their way (12-29) and they feel less secure in handling their peer relationships (8-38). As with EMR girls, they report more positive motivation (8-11); they are more altruistic (4-29) and feel more in control of their future (14-38) than do white EMRs. They also tend not to project blame (12-38) and say that they are obedient (6-11). However, in distinction to the EMR girls, they think well of their looks (11-38) and report less depression (7-11, 17-29) than do white EMRs. Their distinguishing feature, however, is the extent to which the Negro EMRs deny scholastic inadequacy (4-11). They say that they do not need help with their schoolwork (21-29, 21-38), that others think they are athletically competent (19-29), and that they do not manipulate others by putting on a physically helpless stance (38-38). However, Negroes score lower than whites on the social desirability lie scale (3-11, 3-29, 3-38) a finding that contradicts some previous work on Negro-white differences.[6]

In summary, Negroes appear to identify with the underdog and to reject items which would indicate that they are superior to others; at the same time they tend to reject items which describe themselves as weak, depressed, or helpless.

Institutionalization The fact of institutionalization presents an anomaly. Comparing institutionalized with special class noninstitutionalized EMR children raises the question of whom the S has used as a comparison group. For the institutionalized child, is the comparison group of "others" referred to in many self-concept items meant to include children in the institution only, or does it include all children institutionalized or not, that the respondent knows about? This ambiguity is reflected in the results. On the one hand, they report that they are brighter (22-29, 22-38) and more socially competent in school (10-11, 18-29, 8-38, 36-38, 18-38) than do special class children. But in many other ways they say they are at the bottom of the status ladder: they feel physically inferior to others (1-11, 1-29, 1-38), feel that others are socially superior to them (11-11, 7-29, 7-38), feel that they are more maladjusted (2-11), and less good looking (11-38) than do special class children. They characterize themselves in some of the same ways that girls and Negroes do: they are overly attached to home or to their fantasy of what home would be like (13-29), and score higher on two indices of positive motivation (8-11, 14-29). Uniquely, they are more concerned about depression and report more depression than do noninstitutionalized children. They are more generally depressed (7-11) than special class EMRs, more prone to tears (30-38), and less able to see that they can affect the outcome of interpersonal encounters (8-29). They are less able to admit self-destructive fantasies (34-38). To interpret: when the issue is competence, institutionalized children tend to use their institutionalized peers as a comparison group and feel superior. When the issues are the subjective ones of social status and affect, they tend to use the world at large as a comparison group, and feel more inferior than do noninstitutionalized children.

Social Class Using Turner's (1964) nine point index of social class, the mean social class of this sample is in the upper-lower to lower-middle class range with a rather limited variability. It may be the truncation of range which accounts for the lack of correlation between social class and self-concept variables. Only three correlations out of the 78 correlations that were computed against social class were significant at the .05 level. If the correlations can be assumed to be nonchance, lower class children have a poorer opinion of their intellectual capacities (22-29, 22-38) and they are more mischievous (36-38) than lower-middle class children.

Family Variables Number of children in the family, number of older siblings, number of younger siblings, family intactness, degree to which a mother or a mother figure is present in the home, degree to which a father figure is present in the home, geographic stability.

Insert Table 5 about here

Table 5 presents the intercorrelations between these seven variables. As might be expected, they fall into two clusters which are uncorrelated with each other. The first cluster is around the number of children in the family. Examination of the means and intercorrelations suggests that the children in the present sample tend to be among the eldest children in their families, particularly if they come from large families. The second cluster of variables is around family stability, in interpersonal and geographic terms.

Insert Table 6 about here

Table 6 gives the correlations between the self-concept factors and these family variables. In general, self-concept factors which correlate negatively with family size correlate positively with family intactness, and vice versa. The set of self-concept factors most correlated with family size are those around indentification with authority, while those factors most correlated with family intactness are absence of depression and less competence in peer relationships.

In general, children most identified with authority (9-11) are those who come from the largest families. This is particularly true for those who have many younger siblings. Two factors which are associated with identification with authority--Aloof Depression (20-29) and Feeling Rejected at Home (37-38)--also correlate positively with having many younger siblings. Other correlates of being an older child in a large family are an immature attachment to the home (13-29) and an associated absence of easygoing relationships with peers (35-38), a good social adjustment to elders in school (10-11), and a tendency to control people by being weak (38-38). Children with few younger siblings are more naively optimistic about life (15-29), and children with few older siblings are more inclined to admit self-destructive fantasies (34-38). To summarize, children in this EMR sample tend to be the oldest children in large families with many younger sibs to care for. The larger the number of younger sibs, the greater their loss of autonomy, identification with authority, and sense of rejection by their families, and inability to enjoy peers.

The cluster of variables around family intactness and stability has a similar pattern of correlations to those found for institutionalization, a fact which is not completely surprising, since institutionalization is often the end point of a process of family disintegration, and one of the variables in this cluster, family intactness, has institutionalization as its zero point. Family intactness is correlated -.928 with institutionalization. However, institutionalization does not correlate significantly with mother presence, father

presence, or geographic stability, while as Table 6 shows family intactness does. Most generally, in this EMR group, coming from a broken home correlates with a good reported adjustment to school, particularly to peers in the school situation (10-11, 18-29, 8-38, 25-29, 34-38). Coming from a broken home also correlates with feelings of depression (7-11, 30-38), but the denial rather than the admission of self-destructive fantasies (34-38), with feelings of not being responsible for one's interpersonal behavior (8-29), and with feelings of inadequacy (21-29). Children from broken homes tend not to have as high an opinion of their physical prowess as children from more intact families (1-11, 1-29, 1-38), and feel inferior when asked to compare themselves with their peers (7-29, 7-38). At the same time they attempt to present themselves in a manner which will appeal to adults: they say they are more altruistic (4-29), more optimistic about their future (14-29) and more ambitious (5-29) than do children from more intact families. They also score higher on the social desirability lie scale (3-29, 3-38).

Children whose mothers are absent from the home also report better adjustment to their peers in school (18-38), are more ambitious (5-29) and less intropunitive (29-38) than children whose mothers are present. However, they are less confident (than children whose mothers are present in the home) that other people value either their physical assets or social assets very highly (19-29, 20-38). Absence of an adequate father figure is correlated with aloofness from one's peers (31-38) but is chiefly correlated with reported neuroticism (2-11, 2-29, 2-38).

Children who have moved many times in their lives tend to be more outer-directed than children who have moved less often: they are more dependent on other people's opinions and have less sense of belonging (32-38, 25-29) but they are also more concerned about the welfare of others (4-29). Children who have moved many times think that honesty and grades in school (24-29, 17-38) are less important than do

children who have been geographically more stable.

To interpret, family instability appears to have two main effects: to make perceived competence in peer relationships mandatory, and to create a fair amount of depression and anxiety.

Parents'Competence with English Mother's language competence, father's language competence. These variables correlate .699 with each other and both correlate with combativeness (3-11) .301 and .363, respectively. Father's English language competence correlates negatively with the social desirability lie scale (3-29, r = -.360; 3-38, r = -.320), which is one of the main negative correlates of combativeness. This result can be interpreted to mean that subjects whose fathers do not speak English well are more naive to personality tests and present themselves in an extremely favorable, unrebellious light. Ss whose mothers speak English well are more self-critical (20-29, r = +.308) than those Ss whose mothers do not know English well.

Variables Having to do with Illness Visual defect, auditory defect, history of rheumatic fever, heart disease, anemia, pneumonia, miscellaneous other diseases (chorea, polio, scarlet fever, cerebral palsy, cancer, hemophilia), number of major illnesses in life, number of accidents and operations, years since last major illness.

Insert Table 7 about here

As can be seen from Table 7, the occurrence of each of the dichotomous disease variables is rather rare; one of the 65 Ss on whom medical histories were available had been diagnosed as anemic, three out of 65 had had heart disease, and eight of 58 had some kind of visual defect which usually meant that they wore glasses. Even though many of the correlations among these variables and self-concept scores are significant, they necessarily should be interpreted with

caution, since the sample sizes of those with a particular defect are small and must be less than representative. Inspection of Table 7 also reveals that accidents and illnesses have a very skewed, Poisson-like distribution, with most of the misfortunes happening to a rather small number of individuals. The intercorrelations of the disease variables with each other shows that by and large a history of one disease does not predispose a person to other diseases. The exception to this statement is in the fairly high degree of intercorrelation between heart disease and rheumatic fever on the one hand, and heart disease and anemia on the other.

Insert Table 8 about here

Table 8 shows the correlations between these variables and the self-concept factors. On first inspection, the direction of the correlations seems to be consistently wrong: children with a history of disease report better adjustment (particularly to peers) than children who have been healthy. One can assume (after checking the direction of the relationships very carefully) that for this group denial is a very important psychological mechanism for dealing with illness and its consequences.

Children who wear glasses or who have other visual defects score higher on the social desirability lie scale (3-29, 3-38) than those whose vision is normal. They think more highly of themselves (5-11) and think they are easier for adults to get along with (9-29). They attribute their doubts about their social competence to others (20-38). Children with hearing loss maintain that they have friends more consistently (27-29) than do children whose hearing is normal.

Subjects with a history of heart disease report that they act out their anxiety and hostility (6-29, 13-38), and that their adjustment to their peers in school is good

(18-38). Children with a history of rheumatic fever report that others think well of their athletic competence (19-29), that they can be whatever they want when they grow up (14-29, 14-38) and admit fewer self-destructive wishes and acts (34-38) than those without such a history.

Subjects with a history of anemia also report that they are trouble makers (13-38). And children with a history of pneumonia say that they are precariously confident of their superiority to others (16-29, 16-38). Children with a history of one or more of the miscellaneous diseases listed report more social competence with peers (8-38) but feel less responsible for the outcomes of their interpersonal encounters (25-38).

Subjects who have had many major illnesses claim to be better accepted by others (17-29), to have better looks and feel that others think well of their looks and physical prowess (19-29), feel that their future is in their own hands (14-29, 14-38), and admit fewer self-destructive wishes (34-38) than those who have been healthy. However, they report more bitterness about themselves and others (28-38), and a poorer social adjustment to school (10-11), particularly to elders (10-29, 10-38) than those who have remained healthy.

Among those 18 children who have been through a major illness, the pattern of denial seems to decrease with time. Recently recovered children deny any need for help (21-29), and deny any tendencies to use their weakness for interpersonal control (38-38). They have an unrealistic sense of their power to change difficult interpersonal situations (26-29, 26-38). However, they report more depression (28-29) and more alienation from peers (31-38) than do those children whose illness is far in the past.

Subjects who have had many accidents and operations characterize themselves in terms opposite to those who have been ill. They present themselves as being free of maladjustment (2-11) and unlikely to act out their anxiety through destructive behavior (6-29, 13-38) and as lacking in social poise (16-29, 16-38).

In summary, subjects who have been seriously ill or who have physical defects present themselves as being more adequate, more pleasing, more believing in the good opinions of peers, more troublemaking, and less comfortable with elders than children who have been healthy. They appear to react to the fact of illness and the possibility of recurrence by adopting an independent, peer-popular stance. Ss who have been involved in major accidents or who have had operations present themselves as being unaggressive and unobtrusive. They appear to react to this type of threat from outside themselves by avoiding making trouble themselves.

Diseases Affecting the Central Nervous System

Meningitis, encephalitis, brain injury, convulsions, and epilepsy. Table 9 presents the means and standard deviations for these variables. Since one, one, and three subjects in the available sample had had meningitis, encephalitis, and brain injury, respectively, the correlations between these criteria are not meaningful, and hence are not reported. They turn out to be mutually exclusive categories. These categories do overlap with a history of convulsions: the one S who had had meningitis did not have a history of convulsions: the S who had encephalitis did have such a history, and two of the three Ss with brain injury also had had convulsions.

Insert Table 9 about here

Table 9 presents the self-concept correlates of these maladies. As with other diseases, denial is a fairly prominent psychological mechanism. The child with a history of meningitis resembles other children who have been ill in that he reports getting along worse with older people than most children (10-29, 10-38), anc feels more in control of his future (14-29) than most other children.

The child with a history of encephalitis resembles children with visual defect and hearing defect in presenting himself in an excessively socially desirable light (3-11, 3-29, 3-38, 24-38R). He also thinks well of his performance in school (33-38), but thinks of himself as physically handicapped (1-11, 1-29).

The three children with a history of brain injury also put themselves in an excessively socially desirable light (3-11, 3-29) and admit to physical handicap (1-11, 1-29, 1-38) but deny that others think they are unhealthy. While they say that they are bright (22-29, 22-38), they are clearly not motivated to achieve in school (24-29, 17-38) nor are they ambitious for themselves (5-29). They say that they are well behaved at home (6-38).

The four children with a history of convulsions, along with the previous two groups, present themselves in an excessively favorable light (3-29), say that they think well of their performance in school (33-38), are less self-critical (20-29) than their peers but are more generally depressed (7-11).

From the scanty data at hand, it may be suggested that children with illnesses involving the central nervous system do not put on as consistent a front of denial as those who have been ill with other diseases and are now mostly recovered. They see themselves as physically damaged and less academically motivated but nonetheless present themselves as being intellectually more competent than do their peers.

School Absence Total number of days absent year of testing, year before testing, two years before testing; number of days of excused absence year of testing, year before testing, two years before testing; number of days of unexcused absence year before testing; two years before testing.

Insert Table 10 about here

Table 10 shows that the above criteria are fairly highly correlated with each other, except for the last (num-

ber of days truant, two years before testing). This variable correlates close to zero with the others, and less interpretive weight should be placed on it.

Insert Table 11 about here

Table 11 shows the intercorrelations between school absence and the self-concept factors. As might be expected, the school absent child presents himself as intellectually and socially inferior at school, but as disobedient and indulged at home.

Children who, for whatever reason, have missed the most school are relatively unconcerned about presenting themselves favorably (3-11, 3-29, 5-38). They feel relatively well accepted (15-29, 15-38) by their parents and are used to doing what they please (9-11) and getting their own way (12-29). They are not confident of their social abilities with peers, especially in a school situation (11-38, 36-38, 38-38).

Children who have obtained many excused absences from school lack ambition and self-respect in school (5-29, 5-38, 33-38). They are used to having their own way (9-11, 12-29, 6-38) and project blame onto others (12-38). They report poor social adjustment at school (18-38) but at the same time maintain that they have many friends (27-29, 24-38) especially at home. They feel accepted at home (37-38).

Children with many unexcused absences (many days truant) present themselves similarly, but with more emphasis on being disobedient (6-11, 13-29, 6-38), and on being less motivated for school (17-38) than the other groups. While they say that they have considerable poise in public (16-38), they also feel poorly adjusted to their peers at school (18-29, 18-38), and do not think they are as bright as most children (22-38). There is less evidence than for the children with excused absences that they feel accepted by friends at home (24-38) and by their parents (6-38). In contrast with the other school absent groups, they do not feel that they can always get what they want (no correlation with 9-11, 12-29).

Kohs Tasks Pretraining trial (K_1); immediate post-training trial, one day later (K_2); delayed posttraining trial, one month or more later (K_3); gain score $K_2 - K_1$; gain score $K_3 - K_1$; gain score $K_3 - K_2$; LP status (nongainer, gainer, high scorer). See Budoff (1969) for details of the learning potential assessment strategy.

Insert Table 12 about here

The pretraining Kohs test (K_1) was administered to the entire sample. The immediate posttraining Kohs (K_2) was administered to all but 21. About 40% of the total sample received a third administration of the Kohs a month or more following training to determine the long-range effect of the training procedure. Table 12 gives the intercorrelations between the Kohs measures. It is apparent from inspection of the correlations that the best single representative of the Kohs measures is the third Kohs test (K_3). This may be interpreted to mean that this third test is least distorted by negative (strangeness, test anxiety as in K_1) or positive (short term transfer, desire to please as in K_2) motivational effects.

Insert Table 13 about here

Table 13 gives the correlations between the self-concept factors and the various Kohs criteria. Most apparently, maladjustment (2-11) is correlated with a poor Kohs performance throughout. Various components of maladjustment, however, show different patterns of correlation with successive Kohs administrations. The neurotic anxiety component (2-29, 2-38) correlates with poor Kohs performance on the first two tests, and then drops from significance. The acting-out component (6-29, 13-38) correlates with only a poor first performance on the Kohs. Friendlessness (27-29, 24-38), on the other hand,

is increasingly correlated with a poor Kohs performance on successive tests, and suggests that inability to relate intimately interfers with the acquisition of Kohs skills. Alternately, this finding may indicate that those of low, less modifiable intellectual capacity have a great deal of difficulty making friends.

Other correlates of a poor Kohs performance and/or poor gain scores are bravado (16-29, 16-38), mischievousness (36-38), obedience (6-11), and depressed self-criticism (20-29). Correlates of a generally good Kohs performance are feelings that others think well of one's physical capabilities (19-29), the fantasy that one will succeed in adversity (26-29, 26-38), and high motivation for school (24-29).

To summarize, the most intellectually disabled children (by a Kohs learning potential criterion) in this population also report themselves to be the most emotionally and socially handicapped. Children who project the fantasy of self-worth, and those who feel that they can succeed interpersonally under difficult odds do better and improve more on the Kohs tasks than those who do not have fantasies of worth and success. A pattern of peer rejection and obedience at home seem to be major correlates of poor Kohs performance and inability to improve following training.

Intelligence and Achievement Latest IQ; previous IQ; second previous IQ; verbal IQ; reading achievement; performance IQ; Ravens percentile, valid tests only; math achievement.

The intercorrelations of these eight variables are given in Table 14. As can be seen, they form a fairly homogeneous cluster of variables, with subclusters of verbal and nonverbal measures.

Insert Tables 14 and 15 about here

In Table 15 we see their intercorrelations with the self-concept factors. As is the case for the Kohs tasks, maladjustment (2-11) is one of the major correlates of low IQ.

Troublemaking (6-29, 13-38) seems to be the province of those with low verbal IQ, while being without friends (27-29, 24-38) is more characteristic of those children with low performance IQ and low math achievement. Other correlates of low IQ are a high score on the social desirability lie scale (3-11, 3-29, 3-38), aloof relationships with peers (20-29, 29-38, 31-38), and obedient relationships with elders (6-11, 13-38, 6-38, 35-38) combined with a feeling of being rejected by them for poor looks (37-38, 11-38). Children with low IQ report more depressed affect (7-11, 30-38) than the higher IQ children, but at the same time deny any intention of acting it out (28-29, 34-38). In a naive way the lower IQ children are more narcissistic and optimistic about their future (5-11, 14-38).

The higher IQ children in the group are characterized by a better sense of having physical competence (1-11, 19-29), and good looks (11-38), report more competence in getting along with elders (10-11, 10-29, 10-38), are more positively motivated to help people in difficult situations (4-29, 26-38), and are more able to admit that they need help in school (4-11, 21-29).

Good relationships with peers (8-38, 18-38) and a high general opinion of oneself (5-11) seem to correlate negatively with specific achievement (rather than achievement plus intelligence) criteria. Poor achievers report better social competence and think better of themselves than children who are doing well.

Paired Associate Learning PA errors forward; PA errors backwards.

A subsample of 33 children at Belchertown State School was given a paired associate learning task using ten pairs of pictures as stimuli. S was required to name the first picture of a pair, and then anticipate the second. This phase of the task (PA forward) was scored for number of errors to the criterion of one perfect trial. Three days later, 31 of the 33 children in the first situation were administered the task in a backwards format: they were given the (previous) response picture first, and asked to anticipate the stimulus (scored for errors, PA backward). The mean number of errors incurred in reaching the

criterion in the first task was 31.82 (SD 21.40); the mean number of errors in the relearning task was 16.68 (SD 20.43). Both measures are positively skewed, and correlated with each other .651, and correlate negatively (but not significantly) with IQ measures, but positively with achievement.

Insert Table 16 about here

Table 16 indicated the significant correlations between these two measures and the self-concept factors. Most generally those children who are most dissatisfied with their schoolwork and school adjustment are those who make the fewest errors on these two tasks. A good performance on forward associate tasks correlates strongly (negatively) with positive motivation for a better school performance (24-29, 17-38) and admission of an inadequate academic (33-38) and social (10-11, 25-38) adjustment to school. Children with few errors in the initial learning task also report less autonomy (9-11, 14-29).

Maladjustment (2-11) correlates with making few errors on the backwards learning tasks, as do measures of academic inadequacy (4-11, 33-38) and pessimism over the future (14-38).

The ability to make few errors on these tasks seems to be more a matter of motivation than intelligence. It would appear that those children who are most dissatisfied with their academic and social performance are those who do best in paired associate learning.

Discussion

The results indicate quite clearly that reported self-concepts of educable mental retardates bear considerable relationships to the objective facts of their role, situation, and behavior. Many correlations, while low, are statistically significant. In general, those aspects of the self-concept

which covary most with a given criterion variable are those which common sense dictates. The directions of some of the relationships, however, are the reverse of what might be expected. For example, children with normal hearing complain of friendlessness more often than do children with hearing defects. The social stigma connected with hearing loss are such that it is the hard of hearing who probably feel that they have few friends.

Thus, denial may be operating in some areas for some subgroups of subjects and thus reversing or obscuring the expected results. This is not a new problem for self-report personality tests. It seems to be a built-in error in the phenomenological approach to personality assessment. What is required, however, is a theory to predict the conditions, both personal and situational, under which denial will be elicited. For example, the present study indicates that high threat areas evoke denial more than low and that low intelligence is more associated with denial than high within the restricted range of IQ in our sample. Other situational variables (such as the costs of admitting weakness to peers versus parents), and other personality variables (such as tolerance for stress) probably affect denial as well. An exploration of these links connecting phenomenological self-assessment to observational assessment seems indicated.

References

Bialer, I. Conceptualization of success and failure in mentally retarded and normal children. Journal of Personality, 1961, 29, 303-320.

Budoff, M. Learning potential: A supplementary procedure for assessing the ability to reason. Seminars in Psychiatry, 1969, 1, 3, 378-390.

Guthrie, G., Butler, A., & Gorlow, L. Patterns of self attitudes of retardates. American Journal of Mental Deficiency, 1961, 66, 222-229.

Harman, H. H. Modern Factor Analysis. Chicago: the University of Chicago Press, 1967.

Harrison, R. H. & Budoff, M. A factor analysis of the Laurelton Self-Concept Scale. Unpublished manuscript.

Harrison, R. H. & Kass, E. Differences between Negro and White pregnant women on the MMPI. Journal of Consulting Psychology, 1967, 31, 454-463.

Turner, R. H. Social Context of Ambition: A study of high school seniors in Los Angeles. San Francisco: Chandler Publications, 1964.

Footnotes

1. The research described was made possible by support of grants 10588 from the National Institute of Mental Health and 8-0506 from the Division of Research, Bureau of the Handicapped, Office of Education, U.S. Department of Health, Education and Welfare.

2. 12 Maple Avenue, Cambridge, Massachusetts, 02139.

3. See Table 6 in Harrison & Budoff (1970) for an outline of the major interrelationships between the three factor solutions.

4. The reader should note that since different numbers of subjects had measures on each criterion variable, the same numerical degree of correlation in one instance will be significant and in other instances will not be significant. It should also be noted that when one of two fairly equivalent factors correlates with a criterion variable (see Table 1) but the other does not correlate significantly, less confidence should be placed in that relationship than when both versions of a factor correlate with the same criterion.

5. The numbers in parentheses refer to the factors on which the immediately preceding verbal statement is based.

6. Harrison & Kass (1967) reported four studies, including their own, which indicated that Negroes score higher on the MMPI Lie Scale than do whites. The items on the Social Desirability Lie Scale are largely from the MMPI.

Table 1

Intercorrelations Between Age-Related Variables

	N	M	SD	Age	Age SP	Mos. SP	Mos. NE
Age at Testing (Months)	170	177	30	1.00	+574**	+214*	+293*
Age First in Special Class	114	128	40	+574**	1.00	-666**	-425**
Months in Special Class	114	51	35	+214*	-666**	1.00	+476**
Months in Northeastern U.S.	59	155	44	+293*	-425**	+476**	1.00

Significance level of the correlation is indicated by * = $p < .05$, ** = $p < .01$.

Table 2

Intercorrelations of Self-Concept Factors with Age Variables

		Age	Age Sp.	Months Sp.	Months N.E.
Maladjustment	2-11	-153			
Excitable Aggressiveness	6-29	-197			
Excitable Aggressiveness	13-38	-170		-223	
Intropunitiveness	29-38			+186	+276
Friendlessness	24-38	-256			
Friendlessness	27-29		+195		
Combativeness	3-11	+163			
Scholastic Inadequacy	4-11	+176			+261
Lack of Self-Respect in School	33-38R				+281
Lack of Bravado	16-38R	-180			
Narcissism					
Disdainful Narcissism:Looks	11-29	-251	-249		
Body Narcissism	11-38	-204			
Narcissism: Intellect	22-38		-227		
Sheltered Optimism	15-29		-228	+216	
Sheltered Optimism	15-38		-190	+225	
Obedience					
Immature Weakness	13-29	+215	+212		
Lack of Mischievousness	36-38R		+247	-238	
Depression	7-11	+278			
Depression	28-29		+235		-325
Tearfulness	30-38	+329	+414		
Fantasy of Self-Destruction	34-38	-187			
Positive Motivation					
Altruism: Positive Motivation	4-38				-282
Positive School Motivation	24-29	+173			
Future Control	14-29	+167			
Identification with Authority					
Depressed Self-Criticism	20-29	+195	+206		
Depressed Alienation	31-38	+213			
Lack of Willfulness	12-29R			+211	

Table 3

Correlations Between Other Role Determining Variables

	N	M	SD	Sex	Race	Inst.	Class
Sex (M = 0, F = 1)	172	.459	.500	1.00	+256*	+035	+037
Race (W = 0, Orient. = 1, Negro = 2)	172	.430	.824	+256*	1.00	-244*	-073
Institutionalization (Not = 0, I = 1)	172	.273	.472	+035	-244*	1.00	-057
Social Class (1 = low, 9 = high)	101	3.763	.817	+037	-073	-057	1.00

Significance level of the correlation is indicated by * = $p < .05$, ** = $p < .01$.

Table 4

Correlation of Self-Concept Factors

With Role Determining Variables

		Sex (F)	Race (N)	Inst (I)	S.E.S. (low)
Positive Concept of the Physical Self	1-11			-275	
Positive Concept of the Physical Self	1-29			-249	
Positive Concept of the Physical Self	1-38			-223	
Maladjustment	2-11			+153	
Combativeness	3-11	+158	+208		
Low Social Desirability Lie Scale	3-29R		+204	-152	
Low Social Desirability Lie Scale	3-38R		+170		
Scholastic Inadequacy	4-11		-268		
Dependent Inadequacy	21-29		-210		
Dependent Inadequacy	21-38		-255		
Athletic & Social Incompetence: Others' Opinion	19-29		-251		
Fantasy of Control While Weak	38-38		-207		
Narcissism	5-11	-241			
Disdainful Narcissism:Looks	11-29	-271			
Body Narcissism	11-38		+191	-157	
Manipulation Through Guilt	12-38	-237	-219		
Narcissism: Intellect	22-29			+169	-229
Narcissism: Intellect	22-38			+173	-229
Social Incompetence: Others' Opinion	20-38R	-154			
Obedience	6-11	+217	+206		
Immature Weakness	13-29			+202	
Unrelatedness	32-38	+162			
Feeling Accepted at Home	37-38R	+161			
Depression	7-11		-228	+366	
Low Responsibility for Interpersonal Behavior	8-29R			+211	
Depression	28-29	+164			

Table 4 (Cont'd)

		Sex (F)	Race (N)	Inst (I)	S.E.S. (low)
Depression Cont'd					
Tearfulness	30-38			+298	
Fantasy of Self-Destruction	34-38			-180	
Insensitivity to Disapproval	17-29		-154		
Positive Motivation	8-11	+178	+196	+196	
Altruism:Positive Motivation	4-29		+160		
Altruism:Positive Motivation	4-38	+202			
Future Control	14-29			+235	
Future Control	14-38		+186		
Social Adjustment at School	10-11	-247	-184	+267	
Social Competence With Elders	10-29	-272			
Social Competence With Elders	10-38	-270			
Fun-loving Popularity	18-29			+179	
Social Competence With Peers	8-38		-179	+169	
Mischievousness	36-38			+156	+212
School Social Adjustment: Peers	18-38			+156	
Willfulness	12-29	-229	-284		
Social Inferiority	11-11			+172	
Social Inferiority	7-29			+276	
Social Inferiority	7-38	+153		+202	

Table 5

Intercorrelations Between Family Size and Intactness Variables

	N	M	SD	No. Children	No. Older Sibs	No. Younger Sibs	Family Intactness	Mother Presence	Father Presence	Geo. Stab.
Number of Children in the Family	110	5.34	2.603		+338**	+831**	-198	000	+182	-122
Number of Older Sibs	87	1.71	1.454	+338**		-221*	-033	+018	-007	-014
Number of Younger Sibs	89	2.61	2.471	+831**	-221*		-178	-070	+152	-133
Family Intactness[1]	163	5.125	3.487	-198*	-033	-178		+381**	+415**	+464**
Mother Presence[2]	146	4.164	1.424	000	+018	-070	+381**		+780**	+295*
Father Presence[2]	143	4.056	2.603	+182	-007	+152	+415**	+780**		+467**
Geographic Stability 100 (#moves / age)	57	55.09	34.730	-122	-014	-133	+464**	+295*	+467**	

1 Codes for family intactness: subject lives in an institution = 0, foster family, = 1, has family guardian = 2, brother or sister = 3, uncle or aunt or grandparent = 4, 2 grandparents or uncle and aunt = 5, mother alone or father alone = 6, parent and step-parent = 7, 2 parents = 8.

2 Codes for mother presence: deserted = 0, 1 = parents divorced, no step-mother, 2 = parents separated, 3 = mother deceased, no step-mother, 4 = step-mother living, 5 = mother living. The code for father presence is identical.

Significance level of the correlation is indicated by * = $p < .05$, ** = $p < .01$.

Table 6

Relationships Between Self-Concept Factors and Family Variables

		No. Children	No Older Sibs	No. Young. Sibs	Family Intact-ness	Mother Presence	Father Presence	Geographic Stability
Positive Concept of Physical Self	1-11				+265			
Positive Concept of Physical Self	1-29				+245			
Positive Concept of Physical Self	1-38				+237			
Maladjustment	2-11						-182	
Neuroticism	2-29						-201	
Neuroticism	2-38						-169	
Dependent Inadequacy	21-29				-166			
Intropunitiveness	29-38					+189		
Combativeness								
Low Social Desirability Lie Scale	3-29R				+189			
Low Social Desirability Lie Scale	3-38R				+165			
Positive School Motivation	24-29						+344	
Positive School Motivation	17-38					+185	+262	
Narcissism								
Sheltered Optimism	15-29			-214				
Athletic & Social Incompetence: Others Opinion	19-29					-173		
Social Incompetence Others Opinion	20-38R					-163		

Table 6 (Cont'd)

		No. Children	No. Older Sibs	No. Younger Sibs	Family Intactness	Mother Presence	Father Presence	Geographic Stability
Obedience								
Immature Weakness	13-29	+306			-187			
Getting Ahead	5-29				-179	-180		
Lack of Easygoing Friendliness	35-38R			+251				
Depression	7-11				-361			
Tearfulness	30-38				-282			
Lack of Responsibility for Interpersonal Behavior	8-29R			+219	-237			
Positive Motivation	8-11				-198			
Altruism	4-29							-277
Future Control	14-29				-222			
Relatedness	32-38R							-321
Identification with Authority	9-11	+321		+300				
Depressed Self Criticism	20-29			+271				
Feeling Rejected at Home	37-38	+330		+371				
School-Social Adjustment	10-11			+243	-238			
Fun Loving Popularity	18-29				-181			
Social Competence with Peers	8-38				-171			
School-Social Adjustment:Peers	18-38				-174	-194		
Modest Self-Respect	25-29				-197		-282	

Table 6 (Cont'd)

School-Social Adjustment		No. Children	No. Older Sibs	No. Younger Sigs	Family Intactness	Mother Presence	Father Presence	Geographic Stability
Fastasy of Control While Weak	38-38	+222						
Absence of Self-Destructive Fantasy	34-38R		+219		-216			
Feeling of Social Inferiority								
Social Inferiority	7-29							
Social Inferiority	7-38				-255			
Depressed Alienation	31-38				-195			
						-212	-169	

Table 7

Correlations Between Disease Variables

	Vision	Hearing	Rheumatic	Heart	Anemic	Pneumonia	Misc. Dis.	No. Illness	No. Acc. Operat.	Years Elapsed
N	58	58	65	65	65	65	65	65	91	18
M	.138	.052	.031	.046	.015	.031	.104	.215	.154	7.28
SD	.348	.223	.174	.211	.124	.174	.308	.573	.392	3.95
Vision		-097	-076	-093	-053	-076	+088	-152	+193	+051
Hearing	-097		-045	-056	-031	-031	-065	+050	+101	+121
Rheumatic	-076	-045		+385**	-022	-032	+283*	+716**	-073	-144
Heart	-093	-056	+385		+568**	-039	-063	+562**	-090	-443
Anemia	-053	-031	-022	+568**		-022	-036	+393**	-051	-353
Pneumonia	-076	-031	-032	-039	-022		-051	+246*	+142	-160
Misc. Disease	+088	-065	+283*	-063	+036	-051		+500	000	+300
No. Illnesses	-152	+050	+716**	+562**	+393**	+246*	+500**		-024	-307
No. Accidents	+193	+101	-073	-090	-051	+142	000	-024		+217
Years Elapsed	+051	+121	-144	-443	-353	-160	-300	-307	+217	

Significance level of the correlation is indicated by * = $p < .05$, ** = $p < .01$.

Table 8

Relationships Between Self Concept Factors and Disease Variables

		Vision	Hearing	Rheumatic	Heart	Anemic	Pneumonia	Misc. Dis.	No. Illness	No. Acc. Operat.	Years Elapsed
Maladjustment	2-11									-259	
Excitable Aggressiveness	6-29				+310						
Excitable Aggressiveness	13-38				+297	+271			-240	-232	
Combativeness											
Social Desirability Lie Scale	3-29	+317									
Social Desirability Lie Scale	3-38	+413									
Scholastic Inadequacy											
Dependent Inadequacy	21-29										+509
Fantasy of Control While Weak	38-38										+646
Inner Locus of Control	26-29										-481
Inner Locus of Control	26-38										-499
Lack of Bravado	16-29R									+209	
Lack of Bravado	16-38R						-313			+266	
Insensitivity to Disapproval	17-29							-254			
Athletic and Social Incompetence: Others Opinion	19-29		-263								
Narcissism	5-11	+287									
Social Incompetence: Others Opinion		+308									

Table 8 (Cont'd)

		Vision	Hearing	Rheumatic	Heart	Anemic	Pneumonia	Misc. Dis.	No. Illness	No. Acc. Operat.	Years Elapsed
Depression											
Depression	28-29										-501
Lack of Responsibility for Interpersonal Behavior	25-38R							+281			
Denial of Friendlessness	24-38R		+302								
Positive Motivation											
Future Control	14-29			+345					+398		
Future Control	14-38			+247					+244		
Identification with Authority											
Easygoing Friendliness: Adults	9-29	+311									
Bitterness	28-38								+253		
School Social Adjustment	10-11								-246		
Social Competence with Elders	10-29								-301		
Social Competence with Elders	10-38								-288		
Social Competence with Peers	8-38							+276			
School Social Adjustment: Peers	18-38				+245						
Social Inferiority											
Fantasy of Self Destruction	34-38			-314					-329		
Depressed Alienation	31-38										-543

Table 9

Relationships Between Self Concept Factors and Diseases Affecting the Central Nervous System

		Menin-gitis	Enceph-alitis	Brain Injury	Convulsions & Epilepsy
Positive Concept of Physical Self	1-11		-368	-282	
Positive Concept of Physical Self	1-29		-294	-248	
Positive Concept of Physical Self	1-38			-279	
Physical Health: Others' Opinion	19-38			+252	
Uncombativeness	3-11R		+267	+356	
Social Desirability Lie Scale	3-29		+297	+297	+279
Social Desirability Lie Scale	3-38		+281		
Denial of Friend-lessness	24-38R		+284		
Scholastic Adequacy					
Negative School Motivation	24-29			+607	
Negative School Motivation	17-38			+439	
Getting Ahead	5-29			-249	
Narcissism: Intellect	22-29			+271	
Narcissism: Intellect	22-38			+222	
Defensive Self-Respect: School	33-38		+308		+316
Obedience					
Being Approved of at Home	6-38			+286	
Depression	7-11				+249
Low Identification with Authority					
Future Control	14-29	+256			
Lack of Depressed Self Criticism	20-29R				+244
Low Social Competence with Elders	10-29R	+277			
Low Social Competence with Elders	10-38R	+253			

Table 10

Intercorrelations Between Measures of School Attendance

		Total Days Absent			Days Excused Absence			Days Truant	
		Test Year	Prev. Year	Second Prev. Year	Test Year	Prev. Year	Second Prev. Year	Prev. Year	Second Prev. Year
	N	24	37	51	11	32	47	32	47
	M	21.96	17.84	19.94	12.45	16.43	18.06	1.37	.06
	SD	17.97	17.78	18.57	13.12	18.36	17.62	4.93	.32
Total	Test Year		.620*	.629*	.893	.573*	.614**	.449	-.016
Days	Prev. Year	.620*		.878**	.376	.978**	.677**	.704**	.088
Absent	2nd Prev. Yr.	.629*	.878**		.329	.879**	.623**	.531**	-.032
Days	Test Year	.893**	.376	.329		.393	.428	[a]	.105
Excused	Prev. Year	.573*	.978**	.879**	.393		.671**	.732**	-.100
Absence	2nd Prev. Yr.	.614**	.677**	.623**	.428	.671**		.450*	.037
Days	Prev. Year	.449	.704**	.531**	[a]	.732**	.450*		-.069
Truant	2nd Prev. Yr.	-.016	.088	-.032	.105	-.100	.037	-.069	

[a] Observations on these two variables contained no overlapping cases.

Significance level of the correlation is indicated by * = $p < .05$, ** = $p < .01$.

Table 11

Relationships Between Self-Concept Factors and School Attendance

		Total Days Absent			Days Excused Absence			Days Truant	
		Test Year	Prev. Year	Second Prev. Year	Test Year	Prev. Year	Second Prev. Year	Prev. Year	Second Prev. Year
Combativeness	3-11	+412							
Low Social Desirability Lie Scale	3-29R	+431							
Scholastic Inadequacy									
Not Getting Ahead	5-29R						+379		
Self-Abasement	5-38	+424					+374		
Lack of Self-Respect in School	33-38R						+294		
Lack of Narcissism: Intellect	22-38R								+292
Bravado	16-38								+318
Positive School Motivation	17-38							-550	
Narcissism									
Sheltered Optimism	15-29		+347	+306				+388	
Sheltered Optimism	15-38		+338	+302					
Body Narcissism	11-38			-330					
Manipulation Through Guilt	12-38				+620				
Feeling Accepted at Home: Looks	37-38R	+463					+325		
Obedience	6-11							-369	
Immature Weakness	13-29							-428	
Feeling Approved of at Home	6-38					-390		-598	

Table 11 (Cont'd)

		Total Days Absent			Days Excused Absence			Days Truant	
		Test Year	Prev. Year	Second Prev. Year	Test Year	Prev. Year	Second Prev. Year	Prev. Year	Second Prev. Year
Depression									
Friendlessness	27-29						-292		
Friendlessness	24-38					-354	-379	-482	
Intropunitiveness	29-38								-334
Identification With Authority (Low)	9-11R			+320		+369			
Willfulness	12-29	+411		+445	+613		+304		
Social Adjustment at School									
Fun-Loving Popularity	18-29								-442
Mischievousness	36-38			-326					
School Social Adjustment	18-38					-370		-357	
Fantasy of Control While Weak	38-38		-353						

Table 12

Intercorrelations Between Kohs Variables

	N	M	SD	K_1	K_2	K_3	K_2-K_1	K_3-K_1	K_3-K_2	LP
K_1	171	3.50	3.26		773**	719**	131	179	158	563**
K_2	161	5.71	3.70	773**		874**	729**	599**	064	725**
K_3	73	6.01	3.78	719**	874**		558**	813**	540**	718**
K_2-K_1	152	2.78	2.40	131	729**	558		725**	-070	654**
K_3-K_1	73	3.25	2.67	179	599**	813	725**		632**	728**
K_3-K_2	73	0.70	1.84	158	064	540	-070	632**		318**
LP	171	2.13	1.16	563**	725**	718	654**	728**	318**	

Table 13

Relationships Between Self-Concept Factors and Kohs Criteria

		K_1	K_2	K_3	K_2-K_1	K_3-K_1	K_3-K_2	LP
Madadjustment	2-11	-286	-256	-302		-235	-274	-282
Neuroticism	2-29	-225	-230					-193
Neuroticism	2-38	-225	-235					-237
Excitable Aggressiveness	6-29	-164						-172
Excitable Aggressiveness	13-38	-162						
Friendlessness	27-29		-189	-248	-195			-163
Friendlessness	24-38			-253	-172			
Scholastic Inadequacy								
Lack of Bravado	16-29R			+233				
Lack of Bravado	16-38R		+165	+340	+183			
Narcissism								
Athletic and Social Competence: Others' Opinion	19-29R			+291		+245		
Obedience	6-11		-194	-234				
Lack of Mischievousness	36-38R						+290	
Positive Motivation								
Inner Locus of Control	26-29		+178					+156
Inner Locus of Control	26-38					+274		
Positive School Motivation	24-29		+188					+151
Identification With Authority								
Depressed Self-Criticism	20-29			-250				

Table 14

Intercorrelations Between Non-Kohs Measures of Intelligence

	Latest IQ	Previous IQ	Second Prev.IQ	Verbal IQ	Reading Ach. (Grade)	Perf. IQ	Ravens Percent.	Math Ach.
N	171	127	41	64	33	64	89	56
M	69.32	68.92	74.68	69.19	3.84	75.50	1.28	4.26
SD	10.17	10.03	10.59	8.10	.77	15.18	1.64	.96
Latest IQ		.647**	.593**	.764**	.463**	.914**	.315**	.445**
Previous IQ	.647**		.705**	.612**	.218	.543**	.406**	.213
Second Prev. IQ	.593**	.705**		.386	.194	.550	.189	-.002
Verbal IQ	.764**	.612**	.386		.349	.465**	.353	.526
Reading Ach.	.463**	.218	.194	.349		.494	.255	.329
Performance IQ	.914**	.543**	.550	.465**	.494	.	.679**	.554*
Ravens Percentile	.315**	.406**	.189	.353	.225	.679**		.500**
Math Achievement	.445**	.213	-.002	.526	.329	.554	.500**	

Significance level of the correlation is indicated by * = $p < .05$,, ** = $p < .01$.

Table 15
Relationships Between Self-Concept Factors and IQ Variables

		IQ	Prev. IQ	Second Prev. IQ	Verbal IQ	Reading Ach.	Perf. IQ	Ravens Perc.	Math Ach
Positive Concept of Physical Self	1-11	+165	+272						
Athletic and Social Competence: Others' Opinion	19-29R		+205						
Maladjustment	2-11	-315	-181				-315		-303
Neuroticism	2-29	-196							
Neuroticism	2-38	-211							
Excitable Aggressiveness	6-29				-419				
Excitable Aggressiveness	13-38				-381				
Friendlessness	27-29	-173					-271		-360
Friendlessness	24-38	-172					-305		-403
Combativeness	3-11	+233							
Social Desirability Lie Scale	3-29	-281	-208						-273
Social Desirability Lie Scale	3-38	-250	-192		-286			-238	-311
Scholastic Inadequacy	4-11							+215	+286
Dependent Inadequacy	21-29							+221	+265
Narcissism	5-11	-177				-421			
Obedience	6-11						-271		
Immature Weakness	13-29	-199					-327		
Being Approved of at Home	6-38	-196					-267		
Depression	7-11	-158	-238						
Depression	28-29			+314					-279
Tearfulness	30-38		-183						
Fantasy of Self-Destruction	34-38			+404					
Lack of Body Narcissism	11-38R		-226						

Table 15 (Cont'd)

		IQ	Prev. IQ	Second Prev. IQ	Verbal IQ	Reading Ach.	Perf. IQ	Ravens Perc.	Math Ach.
Positive Motivation									
Altruism: Positive Motivation	4-29			+368					
Inner Locus of Control	26-38				+296		+278		
Identification With Authority									
Lack of Control over One's Future	14-38R							+230	
Extra Punitiveness	29-38R								-275
Depressed Self-Criticism	20-29				-247			-279	
Depressed Alienation	31-38							-229	-344
Feeling Rejected at Home	37-38							-215	
Social Adjustment at School	10-11		-247						
Social Competence With Elders	10-29				+290				
Social Competence: Elders	10-38				+258				
Easygoing Friendliness	35-38			-348					
Social Competence With Peers	8-38								-297
School Social Adjustment: Peers	18-38					-361			

Table 16

Relationships Between Self Concept Factors
and Paired Associate Learning

		Forward Errors	Backward Errors
Maladjustment	2-11		-361
Scholastic Inadequacy	4-11		-364
Positive School Motivation	24-29	-450	
Positive School Motivation	17-38	-368	
Lack of Self-Respect In School	33-38R	-493	-404
Identification with Authority	9-11	-345	
Low Future Control	14-29R	-347	
Low Future Control	14-38R		-377
Social Adjustment at School	10-11	+405	
Responsibility for Interperpersonal Behavior	25-38	+366	